

Leading the Launch



IDAHO NATIONAL ENGINEERING AND ENVIRONMENTAL LABORATORY

*Delivering a payload of
responsive technologies*



Technology Deployment



HOME OF SCIENCE AND ENGINEERING SOLUTIONS



Portable Isotopic Neutron Spectroscopy

Problem

INEEL's Idaho Nuclear Technology and Engineering Center Remediation project needed to identify the contents of discarded gas cylinders before removal from a buried waste site.

Baseline Technology

Manual sampling and off-site analysis of suspect gas.

Innovative Technology

The Portable Isotopic Neutron Spectroscopy system interrogates a suspect container with a neutron beam and identifies elemental contents from characteristic gamma-ray signatures.

Comparison

This system enabled identification of contents without venting suspect gas cylinders.

Benefits

This system enabled the project to confirm the contents of the suspect gas cylinders, protect the environment, and enhance worker safety.

